

ON THE CLIMATIC TREATMENT OF CHRONIC
DIARRHŒA.¹

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IN these remarks I shall refer not only to cases which deserve the name "chronic diarrhœa," but to that large class in which the presence of mucus in varying amount in the stools, without diarrhœa, points to the colon as the seat of disease. There are few of us who have not had to deal with protracted and obstinate cases of one or the other of these forms of chronic intestinal catarrh. After many trials and much labor, medicinal and dietetic treatment fails utterly to produce a permanent cure, and our patients, as much disheartened as ourselves, abandon all hope or begin a course of experimental therapeutics on their own account.

For the purposes of this paper, I shall divide cases of this sort into two classes, applying the suggestions as to climatic treatment more particularly to the latter.

The first of these is the simpler and primary form of chronic intestinal catarrh, with or without follicular ulceration. The causes of this form are bad food, privation, exposure, foul air, etc.; and its type is to be found in the chronic diarrhœa of armies, prisons, and camps, and in so many of the pensioners of the government, as a result of camp and prison life of the war.

The disease as we see it most frequently in civil practice is, however, in its nature and origin a very complicated affection, being preceded by long periods of ill-health, marked by chronic indigestion and various nervous disturbances. It is most common between the ages of 35 and 40, when the cares and responsibilities of life are at their maximum. A great strain is then brought to bear upon the individual in the support of an increas-

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ing family, or in the wear and tear of a large business. In the case of women, it can be traced to frequent child-bearing, and to the many exactions of nursing and rearing of children. In both men and women it is the last link in a long chain of events.

Nervous fatigue and overstrain have been followed by gastrointestinal indigestion, hepatic disorder and constipation. Perhaps neurasthenia, lithæmia and gouty phenomena have appeared. Sooner or later the stools contain mucus, either alone, passed in shreds or bands, or else the mucus floats in a fluid, diarrhœal discharge. When the patient has reached this stage we have to deal with a most intractable disease. I ask any one present to take up the life-history of a case of chronic colitis with or without diarrhœa, occurring in the overtaxed professional or business man, still more in the overtaxed child-bearing woman, and see whether there has not been a long history of nerve overstrain, before indigestion, constipation, and mucous fluid stools began. So common is this mode of onset that I am disposed to search for the cause of all cases of chronic colitis in the perturbations and strains of the nervous system, which are brought to bear first upon the higher cerebral faculties.

The disease is a very complex one, and the difficulties which follow all efforts at cure are explained by its nature. In some cases, relaxation from work, a proper diet, combined with other measures, will result in benefit, or even cure, under home treatment; but often the one thing needful cannot be obtained at home, and after repeated and tedious trials no result is reached. It is then that we must adopt necessary and radical measures by insisting upon cessation of work, relief from all care and change of residence and climate.

By pointing to the necessity for heroic measures it is not often that we can fail to compel our patient to give up everything for the time being, and to devote himself to his cure alone. Chronic colitis is by no means well when the diarrhœa is arrested, and recurrences soon show that the lesion is there, although its chief symptoms have been temporarily suspended. To secure a complete restoration of the intestinal coats to their normal state, to get rid of thickened submucous tissue and of chronic vascular distention and glandular hypertrophies, a long period of apparent

cure must pass ; and the aim is not so much to stop diarrhœa, as it is to place the mucous membrane beyond the point of liability to fresh congestions and cell infiltrations, from internal irritation or external chilling. If, therefore, this treatment is to be attempted at all, it is well to fix a limit of time, which will give a reasonable probability of complete cure. This time should be from three or six months to a year, according to the nature of the lesion and the degree of debility, emaciation, anæmia, etc.

In what way should change of climate be secured ; by travel, or by remaining in some one appropriate locality ? And what principle should guide us in the choice of a suitable climate ?

I do not believe that *travel* is beneficial except in a limited number of cases. If the disease be not of long standing, if the diarrhœa be not marked, or easily controlled by dietetic regimen, and if the individual can be relied upon to follow implicitly rules of diet, etc., then travel may be approved of. It is not enough, however, to send such patients away from home on long journeys, with the idea that relief from business cares alone will cure them ; and the formula of a European trip with all its attendant objections is still less to be thought of. It will take but a short experience to show that while European travel will give the required mental relaxation and pleasure, it fails in almost every other respect to meet the indications ; so that while milder cases of intestinal catarrh, as duodenal catarrh and constipation, associated with depression and hypochondriasis, are benefited or cured by the changed conditions in the nerve centres under the influence of the charms of sight-seeing in Europe, yet for more advanced forms of colitis with diarrhœa, such a course is most prejudicial. In the case, however, of those who have such a *penchant* for Europe that no other place will suit them, if it is Europe or nowhere, the dangers and objections may be obviated by avoiding travel, for a time at least, and selecting a climate in Europe where all the other requirements are found ; and no country supplies so great a variety of climate, of mountain, plane, or sea, as does the continent of Europe.

I have, however, seen cases where a trip to Europe, with the injurious incidents of sudden changes of temperature, improper diet, fatigue of movement, and want of proper nursing, have

resulted in an aggravation of the disease, or an unnecessary delay in its cure. The principal object of treatment, the removal of all existing causes of strain of the nervous system, is, of course, gained through the pleasures of travel, especially of travel in Europe, but the disadvantages are so great and so numerous, even in mild cases, that one would hesitate to advise it unless it be undertaken under the direct care of the physician, or of a well-instructed nurse.

Ocean voyages have been very warmly advocated, but the fact that constipation is a most prevalent condition at sea is no reason for its advocacy. In fact a sea-voyage of short duration, as in crowded trans-Atlantic steamers, gives no promise of benefit whatever. An ocean voyage in a sailing vessel, or yacht, in favorable seasons of the year, is not open to the same objections. It has been found that cases of subtropical diarrhoea are frequently benefited by the long voyage from India to England, but this is not always the case. I know instances of cases of chronic diarrhoea, contracted on the South American coast, which have been in no way improved by the long voyage homeward. On the contrary, the inconveniences of shipboard, the difficulty of procuring appropriate diet, and the want of attention to hygienic rules, all tend to aggravate the malady; and, moreover, there is this one important consideration, no one who is not known to be absolutely exempt from sea-sickness should ever be subjected, by way of treatment, to the horrors of an ocean-voyage.

The injurious effects of long sea-voyages, where changes are made from temperate to hot climates, and *vice versa*, have been well shown by the observations of Surgeon Rattray, of the Royal Navy (Proc. Royal Soc., London, 1870-1):—

“A slowly progressive impairment of the physique occurs during long sea-voyages in which ships pass repeatedly and suddenly from cold or temperate to tropical latitudes and the reverse.”

In a total of 138 persons weighed during such a voyage, 65.22 per cent. lost weight, the average loss being 6.93 pounds, but ranging from 1 to 23 pounds. This is not true of long voyages in temperate zones. In a long voyage where the temperature ranged from an average of 69° F. in one locality to 65° F. in

another, out of a total of 132 cases observed there was a gain of weight in 69.69 per cent., the gain averaging 5 pounds; 19.69 per cent. lost flesh, the loss ranging from 1 to 9 pounds. The younger men and boys gained, while their seniors showed no gain or loss. Although, however, this is true in many cases, yet other data show that there is "a constant ebb and flow in the state of health during long voyages." In a voyage of 230 days, 65.05 per cent. lost weight, the loss varying from 1 to 32 pounds; while only 27.18 per cent. gained. This voyage included stays in such healthful climates as Madeira, Simons's Bay, Sydney, Brisbane, on a health-giving, fresh-meat, vegetable, and lime-juice diet.

Granted, then, the necessity for absence from home and relief from causes which negate all home treatment, what climate is preferable for these cases?

There are three conditions which are desirable:—

1st. Surroundings which shall best meet the indications for relief from mental care and give as great a degree of pleasurable diversion as is possible, and thus act favorably on the nervous system.

2d. A climate which will give the greatest activity to the digestive processes, including the appetite, and to nutrition.

3d. Meteorological conditions which will lessen the danger of "taking cold;" that is, of inducing congestive attacks of the gastro-intestinal mucous membrane through sudden changes of temperature.

1. In considering the first question, the locality in which the patient resides, his individual tastes and aptitudes, as well as the gravity of his case, must be taken into account. In every individual there are certain tastes and idiosyncrasies which should be made of help in choosing a residence. Artists, sportsmen, lovers of scenery or haters of scenery, literary men, business men without literary tastes, tired lawyers, physicians, and clergymen, all have peculiarities and tastes which demand thought in the choice of the medium in which they are to live and upon the successful influence of which so much depends.

The views of authors are not well defined as to the most favorable climate for chronic diarrhoea; but the prevalent opinion held is, I believe, that a climate of *great equability*, and where the aver-

age temperature is high rather than low, is to be preferred. The feeling among patients, too, where the matter is left to their decision, is that a warm climate is better for them and that they cannot stand cool and cold weather. The argument for an equable climate has much force, as sudden and marked changes of temperature have such an unfavorable effect; but as great equability can only be secured through prevailing winds which bring the more uniform temperature of the ocean atmosphere, loaded with moisture, we cannot have equability without humidity; so that the question is between a warm, equable, and moist climate or one which is cooler, more variable, and dry. I contend that between these the preference is habitually and wrongly given to the warmer climate in the treatment of chronic diarrhœa; that in Europe patients are sent to the Mediterranean littoral, and in this country to Florida and to the warmer sea-shore and warm inland regions in summer rather than to localities of low temperature. If we were to see in chronic diarrhœa the intestinal disease only, and not the complex morbid state of the whole organism, this choice would still be an unwise one. In chronic diarrhœa it is the whole man who needs treatment, and it is only by a combination of the largest number of favorable influences in the environment, acting on the nervous system, the digestive and nutritive processes, as well as on other functions, that a cure can most quickly and thoroughly be obtained.

The languor of mind and body which prevails in warm weather and in hot climates is due to diminished energy in the nervous system and to impaired nutritive activity in all the tissues. In those whose nervous systems are easily influenced by the environment, heat affects appetite and deranges digestion. How much more is this the case where the digestion is enfeebled by disease and where diarrhœa exists!

There are many other reasons why a warm climate is not beneficial to the anæmic, debilitated sufferer from impaired digestion and chronic diarrhœa, but these are enough to show into what false security he may be lulled by the specious arguments for a climate which will permit him to lie out of doors all day, and where there are no sudden changes of temperature, no need of fires and no necessity for movement or exertion.

The circulatory and respiratory functions are more languid in a hot, but more active in a cold, environment. Digestion and appetite, which directly depend upon the respiration and circulation, are consequently more active in cold than in warm climates. If we can provide for our sufferer a climate in which the last conditions are secured, and at the same time have the most agreeable mental impressions brought to bear upon him, we have the essentials of a climate for the treatment of chronic diarrhœa.

3. A low temperature, in contradistinction to a high one, is not, however, the only desideratum, for if cold be combined with extreme dampness, as on the sea-shore in summer or winter, the most perfect climate is not obtained. A low temperature, with humidity, is not found in this country in summer, unless combined with altitude, and in winter on lower mountain-ranges and elevated table-lands. The possible injurious effects on chronic diarrhœa of a variable low temperature in elevated regions is offset by the dryness of the air which permits exercise without perspiration and chilling of the surface. No one who visits such a climate for the first time can forget that delightful sensation of violent exertion without the resulting uncomfortable feeling of being chilled and taking cold afterwards. There is less danger of "taking cold," in the sense of there being less danger of internal congestion from contraction of peripheral cutaneous vessels in cold dry air, than in moist, warm air; and in these forms of chronic intestinal catarrh there is established such a close relationship and sympathy between the skin and the intestinal lining that the slightest variation of external temperature will produce sudden exacerbations of the disease. I have known the patient to become so keenly alive to this danger as to be a monomaniac on the subject of draughts and changes of temperature.

The *typical climate* for chronic diarrhœa should have a low temperature, as equable as possible, combined with great atmospheric dryness, with a dry porous soil, a clear sky, and with little rain-fall or snow-fall. To these conditions must be added the pleasures of fine scenery, agreeable companionship, with opportunities for amusement, without which but little progress can be made in the treatment of this oftentimes rebellious disease.

As one man's experience is necessarily limited, I would not

venture to suggest an invariable rule of selection. Each case will require advice based on its gravity, the degree of anæmia and debility, peculiarities of temperament, and other conditions. In *summer* for severe cases the Catskill and Adirondack and White Mountains, or other regions of 1500 to 2500 feet elevation, are well fitted. Many other localities in the Appalachian Range will be found to have all the requirements. In Virginia, North Carolina, and Georgia, there are many suitable localities, but in midsummer the more Northern resorts are to be preferred, because the temperature is lower, and for the reasons given a low temperature is to be preferred.

I have no exact data which will enable me to say how the Rocky Mountain region compares with our own mountains, but I believe that in Colorado, New Mexico, and other States and Territories, extreme elevation offers no objection whatever, and that all necessary qualifications are found there. No doubt much may be said on this subject by members of this society from Colorado and elsewhere, who are familiar with the effect of very high altitudes on chronic intestinal inflammation.

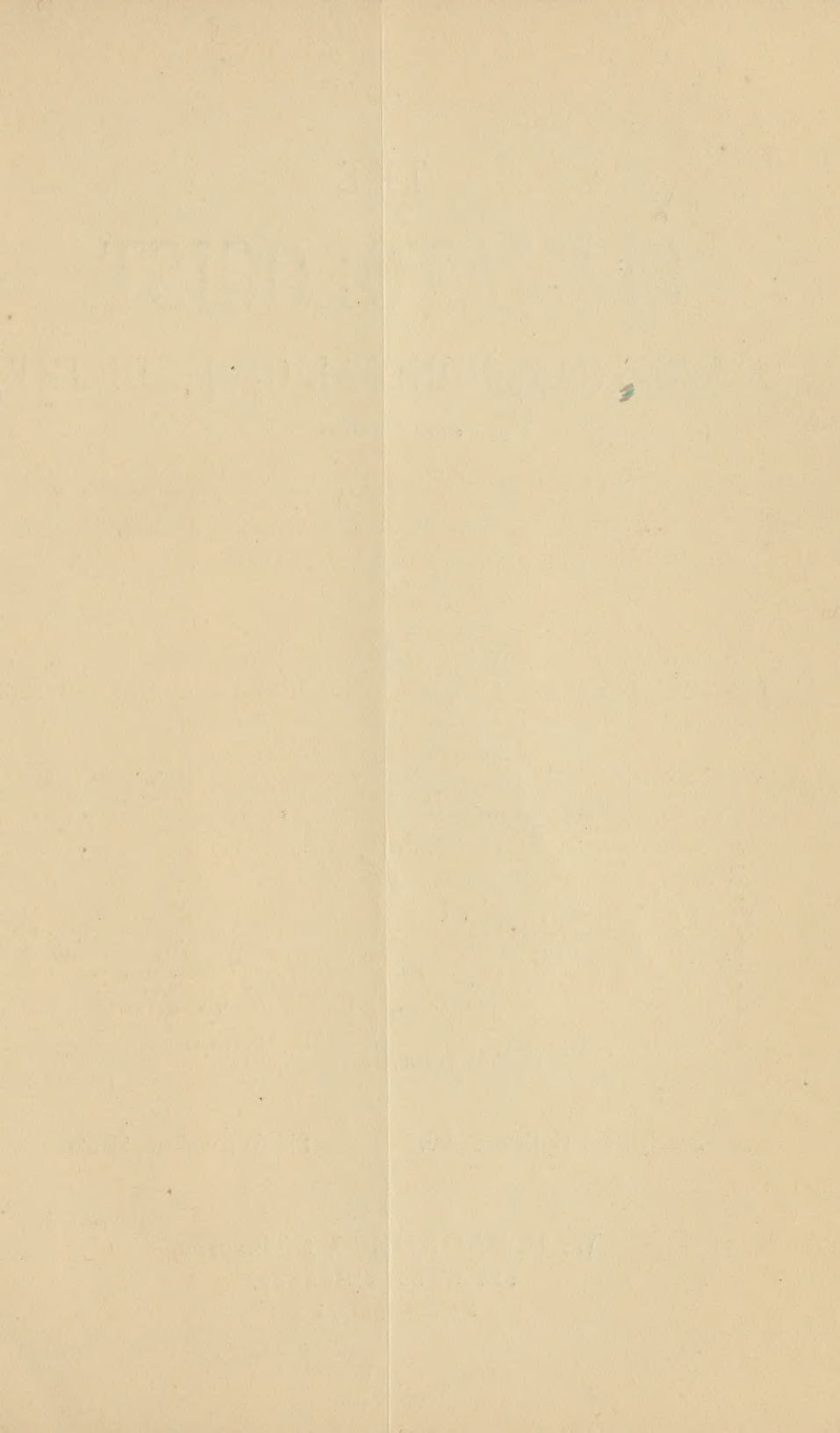
The milder forms of the disease, in which there is a recurrent but not constant diarrhoea, not of long standing, may be sent in summer to the sea-shore of Virginia, Delaware, New Jersey, or Long Island, where bathing in water of not too low temperature may be allowed. The more chronic forms, however, with liquid, membraniform, or mucous discharges, are made worse by the sea air, and should not be sent there in summer and still less in the winter season.

For a *winter* residence, the mountain region of western North Carolina and northern Georgia are peculiarly fitted, more so than the colder Adirondacks. Aiken and similarly situated elevated regions may serve for those unable to stand the mountains. The merits of southern California and of Colorado and New Mexico, as winter homes for such cases, also deserve consideration.

The drawbacks of hotel life are not so great as may be supposed. Competition and the increasing demand for comforts and luxuries in health-resorts provide the health-seeker with almost any convenience he may need, and it will not be difficult for him

to find in a suitable climate all the assistance which comes from a comfortable home and kindly care.

It is not my wish to extol the merits of any section for the cure of this disease, but rather to draw attention to the necessity of cure by residence in an appropriate climate, and to the real climatic conditions to be sought for. And although my remarks may have a somewhat dogmatic tone, they are founded upon instructive experiences, which have taught at least what climates are to be avoided, and what mistakes may be made by an undirected patient, when pleasure is the chief object sought, and when no positive advice is given him as to what he needs.



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